



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,703	03/10/2004	John Michael Koshoffer	GE136081	4309
29827	7590	08/09/2005	EXAMINER	
FRANCIS L. CONTE, ESQ. 6 PURITAN AVENUE SWAMPSCOTT, MA 01907			WIEHE, NATHANIEL EDWARD	
			ART UNIT.	PAPER NUMBER
			3745	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,703

Applicant(s)

KOSHOFFER, JOHN MICHAEL

Examiner

Nathan Wiehe

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 7,8,10,21-24,28,29,31 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9,11-20,25-27 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03102004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of species II in the reply filed on 18 July 2005 is acknowledged. Applicant's traverse is based on the argument that "the examiner has failed to show that the four species are independent inventions". This argument is not persuasive. The several species pointed out by the examiner are considered to be patentably distinct embodiments of the generic invention. Under the authority of 37 CFR 1.146, the examiner may require an election of species in this situation. Furthermore, Applicant has not made the argument that the several species are not patentably distinct.

§ 1.146 Election of species:

In the first action on an application containing a generic claim to a generic invention (genus) and claims to more than one patentably distinct species embraced thereby, the examiner may require the applicant in the reply to that action to elect a species of his or her invention to which his or her claim will be restricted if no claim to the genus is found to be allowable. However, if such application contains claims directed to more than a reasonable number of species, the examiner may require restriction of the claims to not more than a reasonable number of species before taking further action in the application.

The requirement is still deemed proper and is therefore made FINAL.

Claims 7,8,10,21-24,28,29,31 and 32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no

Art Unit: 3745

allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 18 July 2005.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 10 March 2004 is noted. The submission is in compliance with the provisions of 37 CFR 1.97 and 1.98. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 9, 11-17 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Koschier (6,200,092). Koschier discloses a turbine rear frame (10) including an inner band (16), an outer band (14), and a row of outlet guide vanes (18) with internal channels (not referenced) extending through outer band (14). Koschier's disclose outlet guide vanes (18) are bifurcated into a prow (20), a minor portion, and stern (22), a major portion, and integrally joined by a narrow, inwardly spaced septum (32). Koschier also discloses slots (26) and apertures (30) in flow communication with the internal channels (not referenced) that supply pressurized air (28) to the slots (26). The prow and stern of Koschier's outlet guide vane (18) collectively define an aerodynamic profile having a convex suction side (18d) and opposite concave pressure side (18c) extending from a leading edge (18a) on prow (20) to a trailing edge (18b) on

Art Unit: 3745

stern (22) interrupted by slots (26). Koschier also discloses an aft facing slot (26) on the pressure side (18c) of the vane including a lip (not referenced) extending aft over the slot (26).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4,5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koschier in view of Stalker (2,759,663). Koschier discloses the invention substantially as claimed except for a means for withdrawing exhaust flow from the slots into the channels. Stalker teaches a turbine blade (40) with a slot (42) that uses static pressure to draw a flow into the blade channel (80) in order to control the boundary layer on the blade. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the guide vane of Koschier by including a pressure driven means for withdrawing flow into hollow vanes as taught by Stalker (2,759,663) in order to control the boundary layer on the vane.

Claims 6, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koschier as applied to claim 4 above, and further in view of Stalker (2,859,910). Koschier as applied to claim 4 above discloses the invention substantially as claimed except for a frontward facing slot on the vane's suction side. Stalker (2,859,910) discloses a turbine blade (56) with an unobstructed forward facing slot (70) on the

Art Unit: 3745

blade's suction side (not referenced) in order to control the blade's boundary layer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the outlet guide vane of Koschier as applied to claim 4 above by including an unobstructed forward facing slot on the vane's suction side as taught by Stalker (2,859,910) in order to control the vane's boundary layer.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koschier in view of Stalker (2,859,910). Koschier discloses the invention substantially as claimed except for a frontward facing slot on the vane's suction side. Stalker (2,859,910) discloses a turbine blade (56) with a frontward facing slot (70) on the blade's suction side (not referenced) in order to control the blade's boundary layer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the outlet guide vane of Koschier by including a frontward facing slot on the vane's suction side as taught by Stalker (2,859,910) in order to control the vane's boundary layer.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Wiehe whose telephone number is (571)272-8648. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571)272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nathan Wiehe
Examiner
Art Unit 3745



EDWARD K. LOOK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

8/5/05